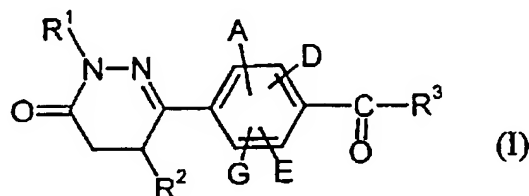


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A 6-carboxyphenyldihydropyridazinone derivative of the general formula (I)



in which

A, D, E and G are identical or different and

represent hydrogen, halogen, trifluoromethyl or hydroxyl, or represent (C₁-C₆)-alkyl or represent (C₁-C₆)-alkoxy,

R¹ and R² are identical or different and

represent hydrogen or represent (C₁-C₆)-alkyl,

R³ represents radicals of the formulae -OR⁴ or -NR⁵R⁶,

in which

R⁴ denotes cycloalkyl having from 3 to 8 carbon atoms or

(C₁-C₃)-alkyl which is optionally substituted by hydroxyl, (C₁-C₆)-alkoxy, cycloalkyl having from 3 to 8 carbon atoms or aryl having from 6 to 10 carbon atoms which, for its part, can be substituted, once to twice,

identically or differently, by substituents which are selected from the group consisting of halogen, (C₁-C₆)-alkoxy, hydroxyl and trifluoromethyl, or denotes (C₁-C₈)-alkyl which is optionally substituted by a group of the formula -NR⁷R⁸,

in which

R⁷ and R⁸ are identical or different and denote hydrogen, (C₁-C₆)-alkyl or benzyl,

or

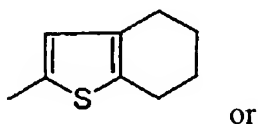
R⁴ denotes vinyl or allyl,

or

R⁴ denotes aryl having from 6 to 10 carbon atoms which is optionally substituted, once to twice, identically or differently, by substituents which are selected from the group consisting of halogen, (C₁-C₆)-alkyl, (C₁-C₆)-alkoxy and hydroxyl,

R⁵ denotes hydrogen or (C₁-C₄)-alkyl,

R⁶ denotes cycloalkyl having from 3 to 8 carbon atoms or a radical of the formula



aryl having from 6 to 10 carbon atoms or a pyridyl, thienyl, pyridazinyl, furyl, or thiazolyl group, it being possible for the ring systems which are listed here to be optionally substituted, once to several times, identically or differently, by substituents which are selected from the group consisting of

halogen, trifluoromethyl, hydroxyl, (C₁-C₆)-alkoxy, carboxyl, (C₁-C₆)-alkoxycarbonyl, (C₁-C₆)-alkyl and radicals of the formulae -SO₂-NR⁹R¹⁰ and -(CO)_a-NR¹¹R¹²,

in which

R⁹, R¹⁰, R¹¹ and R¹² are identical or different and denote hydrogen or (C₁-C₆)-alkyl,

and

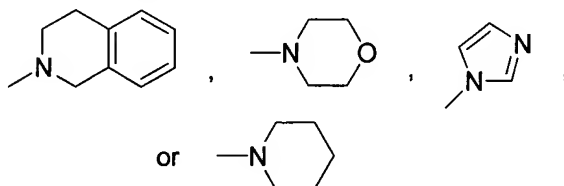
a denotes a number 0 or 1,

or

R⁶ denotes (C₁-C₈)-alkyl which is optionally substituted, once to twice, identically or differently, by substituents which are selected from the group consisting of halogen, trifluoromethyl, hydroxyl, (C₁-C₆)-alkoxy, carboxyl, (C₁-C₆)-alkoxycarbonyl, aryl having from 6 to 10 carbon atoms, pyridyl, thienyl, pyridazinyl, furyl, and thiazolyl, in which the ring systems can be optionally substituted, once to three times, identically or differently, by (C₁-C₆)-alkyl, halogen, (C₁-C₆)-alkoxy, (C₁-C₆)-alkoxycarbonyl, trifluoromethyl or by the radical -CO-NH₂,

or

R⁵ and R⁶ form, together with the nitrogen atom, cyclic radicals of the formulae



or a pharmaceutically acceptable salt thereof.

2. (Currently amended) The 6-carboxyphenyldihydropyridazinone derivative of claim 1, wherein in the general formula (I)

A, D, E and G are identical or different and
represent hydrogen, fluorine, chlorine, bromine or trifluoromethyl,

R¹ and R² are identical or different and
represent hydrogen or represent methyl,

R³ represents radicals of the formulae -OR⁴ or -NR⁵R⁶,

in which

R⁴ denotes cyclopropyl, cyclopentyl or cyclohexyl or
denotes (C₁-C₆)-alkyl which is optionally substituted by hydroxyl, (C₁-C₄)-alkoxy, cyclopropyl, cyclopentyl, cyclohexyl or phenyl which, for its part, can be substituted once to twice, identically or differently, by substituents selected from the group consisting of fluorine, chlorine, bromine, (C₁-C₄)-alkoxy, hydroxyl and trifluoromethyl, or

denotes (C₁-C₆)-alkyl which is optionally substituted by a group of the formula -NR⁷R⁸,

in which

R⁷ and R⁸ are identical or different and denote hydrogen or (C₁-C₄)-alkyl,

or

R^4 denotes allyl,

R^5 denotes hydrogen or (C_1-C_3) -alkyl,

R^6 denotes cyclopropyl, cyclopentyl or cyclohexyl or
denotes phenyl, thienyl, thiazolyl, furyl or pyridyl, it being possible for the
listed aromatic ring systems to be optionally substituted, once to twice,
identically or differently, by substituents selected from the group
consisting of fluorine, chlorine, bromine, trifluoromethyl, hydroxyl,
 (C_1-C_3) -alkoxy, (C_1-C_3) -alkoxycarbonyl, (C_1-C_4) -alkyl and radicals of the
formulae $-SO_2NR^9R^{10}$ and $-(CO)_a-NR^{11}R^{12}$,

in which

R^9 , R^{10} , R^{11} and R^{12} are identical or different and denote hydrogen or (C_1-C_4) -
alkyl,

and

a denotes a number 0 or 1,

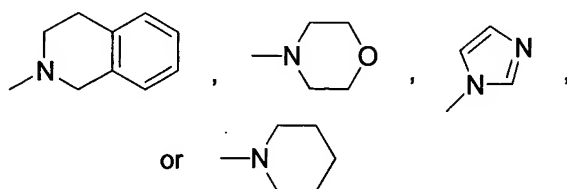
or

R^6 denotes (C_1-C_6) -alkyl which ~~is~~ ~~are~~ optionally substituted once to twice,
identically or differently, by substituents selected from the group
consisting of fluorine, chlorine, bromine, trifluoromethyl, hydroxyl,
 (C_1-C_4) -alkoxy, (C_1-C_4) -alkoxycarbonyl, phenyl, pyridyl, naphthyl, furyl
and thiazolyl, it being possible for the ring systems to be optionally

substituted, once to twice, identically or differently, by fluorine, chlorine, methyl, methoxycarbonyl, trifluoromethyl or by a radical of the formula -CO-NH₂,

or

R⁵ and R⁶ form, together with the nitrogen atom, cyclic radicals of the formulae



3. (Currently amended) The 6-carboxyphenyldihydropyridazinone derivative of claim 1, wherein in the general formula (I)

A, D, E and G represent hydrogen,

R¹ and R² are identical or different and
represent hydrogen or represent methyl,

R³ represents radicals of the formulae -OR⁴ or -NR⁵R⁶,

in which

R⁴ denotes cyclopropyl, cyclopentyl or cyclohexyl or
denotes (C₁-C₅)-alkyl which is optionally substituted by (C₁-C₄)-alkoxy, cyclopropyl, cyclopentyl, cyclohexyl or phenyl which, for its part, can be substituted, once to twice, identically or differently, by substituents selected from the group consisting of fluorine, chlorine, (C₁-C₄)-alkoxy, hydroxyl and trifluoromethyl, or

denotes (C₁-C₄)-alkyl which is optionally substituted by a group of the formula -NR⁷R⁸,

in which

R⁷ and R⁸ are identical or different and denote hydrogen, benzyl or methyl,

or

R⁴ denotes allyl,

R⁵ denotes hydrogen or (C₁-C₃)-alkyl,

R⁶ denotes cyclopropyl, cyclopentyl or cyclohexyl or denotes naphthyl, phenyl, thienyl, thiazolyl, furyl or pyridyl, the listed ring systems being optionally substituted once to twice, identically or differently, by substituents selected from the group consisting of fluorine, chlorine, bromine, trifluoromethyl, (C₁-C₃)-alkoxy, (C₁-C₃)-alkoxycarbonyl, (C₁-C₃)-alkyl and radicals of the formulae -SO₂-NR⁹R¹⁰ and -(CO)_a-NR¹¹R¹²,

in which

R⁹, R¹⁰, R¹¹ and R¹² are identical or different and denote hydrogen or (C₁-C₄)-alkyl,

and

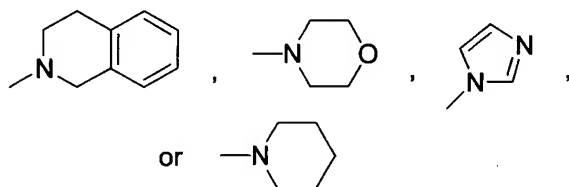
a denotes a number 0 or 1,

or

R^6 denotes (C_1-C_6) -alkyl which is optionally substituted by substituents selected from the group consisting of fluorine, chlorine, trifluoromethyl, (C_1-C_3) -alkoxy, (C_1-C_3) -alkoxycarbonyl, phenyl, pyridyl, naphthyl, furyl, thienyl and thiazolyl, the ring systems optionally being substituted once to twice, identically or differently, by fluorine, chlorine, methyl, methoxycarbonyl or trifluoromethyl or by a radical of the formula $-CO-NH_2$,

or

R^5 and R^6 form, together with the nitrogen atom, cyclic radicals of the formulae



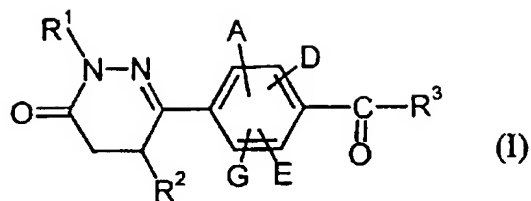
4. (Previously presented) The 6-carboxyphenyldihydropyridazinone derivative of claim 1, wherein in the general formula (I)

A, D, E and G represent hydrogen,

R^3 represents the radical $-NR^5R^6$, where $R^5 = H$ or methyl and R^6 is as defined in claim 1,

and the remaining radicals have the meanings defined in claim 1.

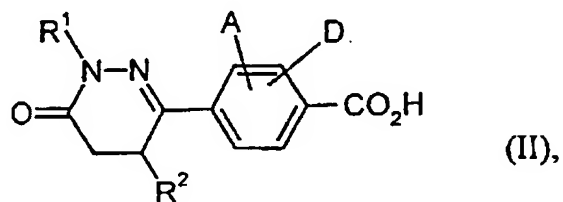
5. (Currently amended) A process for preparing 6-carboxy-phenyl-dihydropyridazinone derivatives of formula (I) as defined in claim 1



characterized in that

[[A]] (A) in the case where R^3 represents the radical of the formula $-OR^4$ in general formula (I),

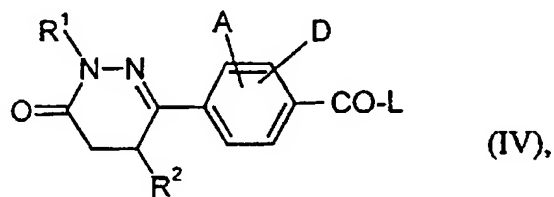
~~compounds~~ a compound of the general formula (II)



in which

A, D, R^1 and R^2 are as defined in claim 1,

~~are~~ is initially converted, by reaction with a carboxylic acid-activating ~~reagents~~ reagent, using customary methods, into ~~the compounds~~ a compound of the general formula (IV)



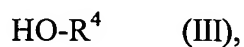
in which

A, D, R^1 and R^2 are as defined in claim 1,

and

L represents an activating radical,

and, in a second step, reacted with ~~compounds~~ a compound of the general formula (III)



in which

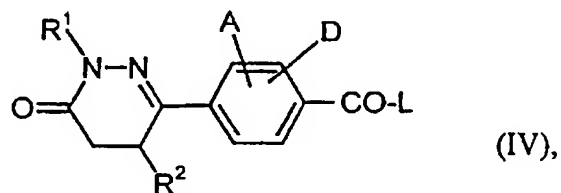
R^4 is as defined in claim 1,

in an inert solvent, where appropriate in the presence of a base,

or

[[B]] (B) in the case where R^3 represents the radical of the formula $-\text{NR}^5\text{R}^6$ in the above general formula (I),

~~compounds~~ a compound of the general formula (II) ~~are~~ is initially converted, by reaction with a carboxylic acid-activating ~~reagents~~ reagent, and using customary methods, into ~~the~~ compounds a compound of the general formula (IV)

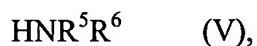


in which

A , D , R^1 and R^2 are as defined in claim 1,

and

L represents an activating radical,
and, in a second step, reacted with an amine of the general formula (V)



in which

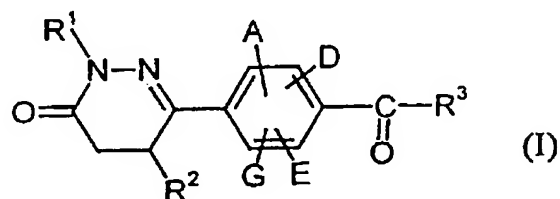
R^5 and R^6 are as defined in claim 1,

in an inert solvent.

6. (Previously presented) A pharmaceutical composition which comprises at least one compound of claim 1, and also one or more pharmacologically acceptable excipients.

7, 8, and 9 (cancelled)

10. (Previously presented) A method for prophylaxis or treatment of anemia comprising administering to a subject an effective amount of a 6-carboxyphenyldihydropyridazinone derivative of the general formula (I)



in which

A, D, E and G are identical or different and

represent hydrogen, halogen, trifluoromethyl or hydroxyl, or represent (C₁-C₆)-alkyl or represent (C₁-C₆)-alkoxy,

R¹ and R² are identical or different and

represent hydrogen or represent (C₁-C₆)-alkyl,

R³ represents radicals of the formulae -OR⁴ or -NR⁵R⁶,

in which

R⁴ denotes cycloalkyl having from 3 to 8 carbon atoms or (C₁-C₈)-alkyl which is optionally substituted by hydroxyl, (C₁-C₆)-alkoxy, cycloalkyl having from 3 to 8 carbon atoms or aryl having from 6 to 10 carbon atoms which, for its part, can be substituted, once to twice, identically or differently, by substituents which are selected from the group consisting of halogen, (C₁-C₆)-alkoxy, hydroxyl and trifluoromethyl, or

denotes (C₁-C₈)-alkyl which is optionally substituted by a group of the formula -NR⁷R⁸,

in which

R⁷ and R⁸ are identical or different and denote hydrogen, (C₁-C₆)-alkyl or benzyl,

or

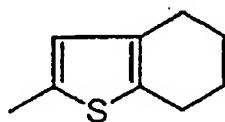
R⁴ denotes vinyl or allyl,

or

R^4 denotes aryl having from 6 to 10 carbon atoms which is optionally substituted, once to twice, identically or differently, by substituents which are selected from the group consisting of halogen, (C_1-C_6) -alkyl, (C_1-C_6) -alkoxy and hydroxyl,

R^5 denotes hydrogen or (C_1-C_4) -alkyl,

R^6 denotes cycloalkyl having from 3 to 8 carbon atoms or a radical of the formula



or

aryl having from 6 to 10 carbon atoms or a pyridyl, thienyl, pyridazinyl, furyl, or thiazolyl group, it being possible for the ring systems which are listed here to be optionally substituted, once to several times, identically or differently, by substituents which are selected from the group consisting of halogen, trifluoromethyl, hydroxyl, (C_1-C_6) -alkoxy, carboxyl, (C_1-C_6) -alkoxycarbonyl, (C_1-C_6) -alkyl and radicals of the formulae $-SO_2-NR^9R^{10}$ and $-(CO)_a-NR^{11}R^{12}$,

in which

R^9 , R^{10} , R^{11} and R^{12} are identical or different and denote hydrogen or (C_1-C_6) -alkyl,

and

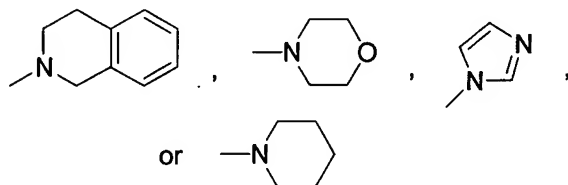
a denotes a number 0 or 1,

or

R^6 denotes (C₁-C₈)-alkyl which is optionally substituted, once to twice, identically or differently, by substituents which are selected from the group consisting of halogen, trifluoromethyl, hydroxyl, (C₁-C₆)-alkoxy, carboxyl, (C₁-C₆)-alkoxycarbonyl, aryl having from 6 to 10 carbon atoms, pyridyl, thienyl, pyridazinyl, furyl, and thiazolyl, in which the ring systems can be optionally substituted, once to three times, identically or differently, by (C₁-C₆)-alkyl, halogen, (C₁-C₆)-alkoxy, (C₁-C₆)-alkoxycarbonyl, trifluoromethyl or by the radical -CO-NH₂,

or

R^5 and R^6 form, together with the nitrogen atom, cyclic radicals of the formulae



or a pharmaceutically acceptable salt thereof.

11. (Previously presented) The method of claim 10 wherein in the 6-carboxyphenyldihydropyridazinone derivative of the general formula (I)

A, D, E and G are identical or different and

represent hydrogen, fluorine, chlorine, bromine or trifluoromethyl,

R^1 and R^2 are identical or different and

represent hydrogen or represent methyl,

R^3 represents radicals of the formulae -OR⁴ or -NR⁵R⁶,

in which

R^4 denotes cyclopropyl, cyclopentyl or cyclohexyl or denotes (C₁-C₆)-alkyl which is optionally substituted by hydroxyl, (C₁-C₄)-alkoxy, cyclopropyl, cyclopentyl, cyclohexyl or phenyl which, for its part, can be substituted once to twice, identically or differently, by substituents selected from the group consisting of fluorine, chlorine, bromine, (C₁-C₄)-alkoxy, hydroxyl and trifluoromethyl, or

denotes (C₁-C₆)-alkyl which is optionally substituted by a group of the formula $-NR^7R^8$,

in which

R^7 and R^8 are identical or different and denote hydrogen or (C₁-C₄)-alkyl,

or

R^4 denotes vinyl or allyl,

R^5 denotes hydrogen or (C₁-C₃)-alkyl,

R^6 denotes cyclopropyl, cyclopentyl or cyclohexyl or denotes phenyl, thienyl, thiazolyl, furyl or pyridyl, it being possible for the listed aromatic ring systems to be optionally substituted, once to twice, identically or differently, by substituents selected from the group consisting of fluorine, chlorine, bromine, trifluoromethyl, hydroxyl, (C₁-C₃)-alkoxy, (C₁-C₃)-alkoxycarbonyl, (C₁-C₄)-alkyl and radicals of the formulae $-SO_2NR^9R^{10}$ and $-(CO)_a-NR^{11}R^{12}$,

in which

R^9 , R^{10} , R^{11} and R^{12} are identical or different and denote hydrogen or (C₁-C₄)-alkyl,

and

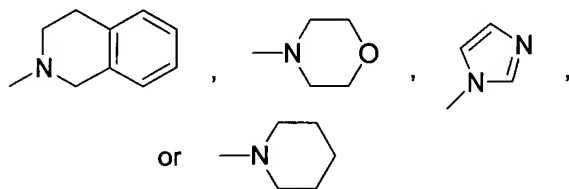
a denotes a number 0 or 1,

or

R^6 denotes (C₁-C₆)-alkyl which are optionally substituted once to twice, identically or differently, by substituents selected from the group consisting of fluorine, chlorine, bromine, trifluoromethyl, hydroxyl, (C₁-C₄)-alkoxy, (C₁-C₄)-alkoxycarbonyl, phenyl, pyridyl, naphthyl, furyl and thiazolyl, it being possible for the ring systems to be optionally substituted, once to twice, identically or differently, by fluorine, chlorine, methyl, methoxycarbonyl, trifluoromethyl or by a radical of the formula -CO-NH₂,

or

R^5 and R^6 form, together with the nitrogen atom, cyclic radicals of the formulae



12. (Previously presented) The method of claim 10 wherein in the 6-carboxyphenyldihydropyridazinone derivatives of the general formula (I)

A, D, E and G represent hydrogen,

R^1 and R^2 are identical or different and
represent hydrogen or represent methyl,

R^3 represents radicals of the formulae $-OR^4$ or $-NR^5R^6$,

in which

R^4 denotes cyclopropyl, cyclopentyl or cyclohexyl or
denotes (C_1-C_5) -alkyl which is optionally substituted by (C_1-C_4) -alkoxy,
cyclopropyl, cyclopentyl, cyclohexyl or phenyl which, for its part, can be
substituted, once to twice, identically or differently, by substituents
selected from the group consisting of fluorine, chlorine, (C_1-C_4) -alkoxy,
hydroxyl and trifluoromethyl, or

denotes (C_1-C_4) -alkyl which is optionally substituted by a group of the
formula $-NR^7R^8$,

in which

R^7 and R^8 are identical or different and denote hydrogen, benzyl or methyl,

or

R^4 denotes allyl,

R^5 denotes hydrogen or (C_1-C_3) -alkyl,

R^6 denotes cyclopropyl, cyclopentyl or cyclohexyl or

denotes naphthyl, phenyl, thienyl, thiazolyl, furyl or pyridyl, the listed ring systems being optionally substituted once to twice, identically or differently, by substituents selected from the group consisting of fluorine, chlorine, bromine, trifluoromethyl, (C₁-C₃)-alkoxy, (C₁-C₃)-alkoxycarbonyl, (C₁-C₃)-alkyl and radicals of the formulae -SO₂-NR⁹R¹⁰ and -(CO)_a-NR¹¹R¹²,

in which

R⁹, R¹⁰, R¹¹ and R¹² are identical or different and denote hydrogen or (C₁-C₄)-alkyl,

and

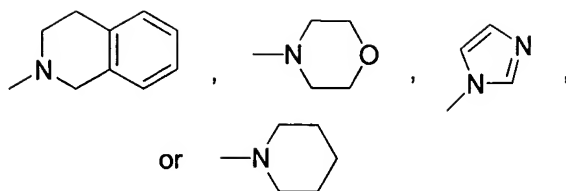
a denotes a number 0 or 1,

or

R⁶ denotes (C₁-C₆)-alkyl which is optionally substituted by substituents selected from the group consisting of fluorine, chlorine, trifluoromethyl, (C₁-C₃)-alkoxy, (C₁-C₃)-alkoxycarbonyl, phenyl, pyridyl, naphthyl, furyl, thienyl and thiazolyl, the ring systems optionally being substituted once to twice, identically or differently, by fluorine, chlorine, methyl, methoxycarbonyl or trifluoromethyl or by a radical of the formula -CO-NH₂,

or

R⁵ and R⁶ form, together with the nitrogen atom, cyclic radicals of the formulae



13. (Previously presented) The method of claim 10 wherein in the 6-carboxyphenyldihydropyridazinone derivatives of the general formula (I)

A, D, E and G represent hydrogen,

R^3 represents the radical $-NR^5R^6$, where $R^5 = H$ or methyl and R^6 is as defined in claim 10,

and the remaining radicals are as defined in claim 10.

14. (Previously presented) The method as claimed in one of claims 10 to 13 wherein the anemia is selected from the group consisting of premature baby anemias, anemias associated with chronic renal insufficiency, anemias following chemotherapy and anemias in HIV patients.
15. (Currently amended) The method as claimed in one of claims 10 to 13 wherein the ~~anemia~~ anemia results from individuals donating their own blood and the treatment is to stimulate erythropoiesis.
- 16, 17, and 18 (canceled)
19. (Previously presented) The method as claimed in one of claims 10 to 13, characterized in that the 6-carboxyphenyldihydropyridazinone derivative is administered orally.
20. (Previously presented) The process of claim 5 wherein in structure (IV), the activating radical L is chlorine or imidazolyl.

Remarks / Arguments

Claims 1-6, 10-15, 19, and 20 are pending in this application. Claims 7-9 and 16-18 were canceled previously. Claims 1-3, 5, and 15 have been amended. No new matter has been added.

It is noted that claims 10-14 and 19 have been allowed.

Amendments to the specification

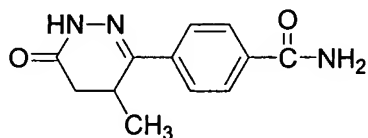
The previously-presented amendments to the specification were not entered, on the ground that the requested changes were not in conformance with the revised amendment practice. Applicants believe that the requested amendments were in conformance and should have been entered, but have now re-presented these amendments with accompanying language which makes it clear that the portions of text referred to are in fact paragraphs, even though they may only relate to one or two lines of the specification. If the format of the requested amendments is still not deemed correct, the examiner is requested to telephone the undersigned and inform him exactly what will be required.

Replacement tables for pages 30 and 32

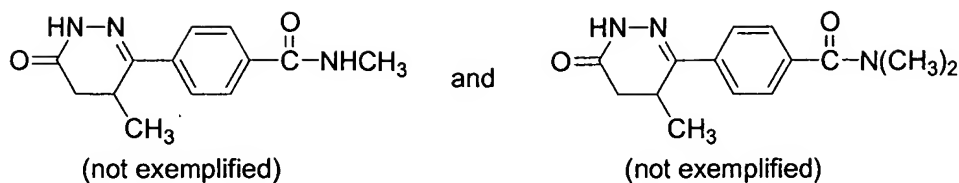
In response to the examiner's request that the tabular data presentations for pages 30 and 32 be resubmitted, the amended versions of the tables on the respective pages have now been resubmitted with this response, along with the request to replace the originals with the amended versions.

Rejection under §103

Claims 1-6 and 20 were rejected under §103 on grounds of obviousness over McEvoy in view of March. Compound 56 of McEvoy has the structure

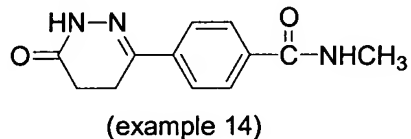


Applicants claims following the previous amendment covered compounds having the structures



The examiner indicates that the above-identified compounds are considered to be the compounds of the present invention which are closest to the prior art compound of McEvoy, and are considered obvious because their structures are “very similar” to that of the McEvoy compound 56 (differing only in having one or two methyl groups on the amide nitrogen), and the reference compound is disclosed as having antihypertensive activity.

The examiner did not apparently consider applicants’ exemplary compound 14 in making her obviousness rejection. Example 14 has the structure



In the present amendment, applicants have deleted the word “optionally” from the definition of R⁶ as (C₁-C₈)-alkyl of in claim 1, and from the definition of R⁶ as (C₁-C₆)-alkyl in claims 2 and 3. This amendment now requires that when R⁶ is alkyl, this alkyl group must bear one or two substituents selected from the list of possible substituents recited in the claims. It is deemed that the compounds of the McEvoy reference do not suggest the presently-claimed amides in which any N-alkyl groups R⁶ must bear one or more further substituents, and therefore that the obviousness rejection is now overcome.

It is the applicants’ understanding that in the event that the present claims are found to be allowable, and this application issues as a patent, the applicants may pursue claims to subject matter deleted from this application in one or more continuing applications, and may submit appropriate arguments and/or comparative test data as necessary to overcome any obviousness rejections in the continuing case(s).

Process claim 5 has been amended to place the language in the more usual US form, and should be patentable once the compounds of the invention are found to be patentable. Dependent claim 20 should be patentable once independent claim 5 is found to be patentable.

Objection to claim 15

Claim 15 has been amended to correct the typographical error which the examiner pointed out.

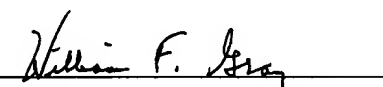
In view of the above amendments and arguments, this application is deemed to be in condition for allowance, and allowance is accordingly requested.

Respectfully submitted,

Reg. No.: 31018

Phone: (203) 812-2712

Date: JUL 01 2004



William F. Gray

Bayer Pharmaceuticals Corporation
400 Morgan Lane
West Haven, CT 06516-4175